

Notice of Allowability

Application No.

09/768,003

Examiner

Kim-Kwok CHU

Applicant(s)

TAKAHASHI, SHINICHI

Art Unit

2653

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Amendment filed on 1/24/06.
2. ☒ The allowed claim(s) is/are 13-17, 23-25, 27 and 28 which are renumbered as 1-10 respectively.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some* c) ☐ None of the:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

EXAMINER'S AMENDMENT

1. An Examiner's Amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 C.F.R. 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the Issue Fee.

2. The Amendment filed on January 24, 2006 has been amended as follows:

(a) in claim 23, line 9, the term "though" has been changed to --through--;

(b) similarly, in claim 23, line 10, the term "though" has been changed to --through--; and

(b) in addition, in claim 27, line 11, the term "passing though" has been changed to --passing through--.

Allowable Subject Matter

3. Claims 13-17, 23-25, 27 and 28 are allowable over prior art.

4. The following is an Examiner's statement of reasons for the indication of allowable subject matter based on Amendment filed on January 24, 2006.

As in claim 13, the prior art of record fails to teach or fairly suggest an optical pickup apparatus having the following features:

(a) the optical pickup apparatus for reading information from a plurality of types of discs at different reading wavelengths;

(b) a light source having integrated light emitting portions for emitting first and second laser beams of different wavelengths, the light source being adapted to selectively emit one of the first and second laser beams of different wavelengths;

(c) an optical system that generates a main beam and two sub-beams from a selected laser beam of the first and second laser beams and directs the main beam and the sub-beams towards an object disc;

(d) a first four-division photodetector, a second four-division photodetector, wherein the first and second four-division photodetectors are arranged such that central

division lines of the first and second four-division photodetectors are in alignment with one another and coincident with a tangential direction of a track of the object disc;

(e) a first sub-photodetector disposed on one side of the first and second four-division photodetectors in a direction along which the central division lines extend; and

(f) a second sub-photodetector disposed on another side of the first and second four-division photodetectors in the direction along which the central division lines extend, wherein the optical system directs a main beam reflected from the object disc to a corresponding one of the first and second four-division photodetectors and directs the sub-beams reflected from the object disc to the first and second sub-photodetectors.

As in claim 23, the prior art of record fails to teach or fairly suggest an optical pickup apparatus having the following features:

(a) a light source that selectively emits one of a first laser beam and a second laser beam as a selected beam, wherein the first laser beam has a different wavelength than the second laser beam;

(b) an optical system that directs a first main beam, which corresponds to the selected beam, to a first four-division photodetector and that directs a first sub-beams

which corresponds to the selected beam to a first sub-photodetector;

(c) a first straight line passing through a first optical axis of the first laser beam and through a second optical axis of the second laser beam is parallel to a tangential line of a track of a disc to be reproduced by the optical pickup apparatus;

(d) a second four-division photodetector and a second sub-photodetector;

(e) the optical system directs a second main beam, which corresponds to the selected beam, to the second four-division photodetector and that directs a second sub-beam, which corresponds to the selected beam to the second sub-photodetector; and

(f) a second straight line passes through the first four-division photodetector, the second four-division photodetector, the first sub-photodetector, and the second sub-photodetector.

As in claim 27, the prior art of record fails to teach or fairly suggest an optical pickup apparatus having the following features:

(a) a light source that selectively emits one of a first laser beam and a second laser beam as a selected beam, wherein the first laser beam has a different wavelength than the second laser beam;

(b) an optical system that directs a first main beam, which corresponds to the selected beam, to a first four-division photodetector, that directs a first sub-beam, which corresponds to the selected beam to a first sub-photodetector, that directs a second main beam, which corresponds to the selected beam, to a second four-division photodetector, that directs a second sub-beam, which corresponds to the selected beam to a second sub-photodetector;

(c) a straight line passing through the first four-division photodetector, the first sub-photodetector, the second four-division photodetectors and the second sub-photodetector is parallel to a tangential line of a track on a disc to be reproduced by the optical pickup apparatus; and

(d) the first four-division photodetector, the first sub-photodetector, the second four-division photodetector, and the second sub-photodetector are aligned in an order the first sub-photodetector, the first four-division photodetector, the second four-division photodetector, and the second sub-photodetector.

The features indicated above, in combination with the other elements of the claims, are not anticipated by, nor made obvious over, the prior art of record.

5. Any comments considered necessary by applicant must be submitted no later than the payment of the Issue Fee and, to avoid processing delays, should preferably **accompany** the Issue Fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Izumi et al. (6,567,355) is pertinent because Izumi teaches an integrated laser source having two laser emitters with different wavelengths and two arrays of photodetectors each corresponds to the different wavelengths.

7. Any response to this action should be mailed to:

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Or faxed to:

(571) 273-8300 (for formal communications intended for entry. Or:

(571) 273-7585, (for informal or draft communications, please label "PROPOSED" or "DRAFT")

Any inquiry of a general nature or relating to the status of this application should be directed USPTO Contact Center (703) 308-4357; Electronic Business Center (703) 305-3028.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kim CHU whose telephone number is (571) 272-7585 between 9:30 am to 6:00 pm, Monday to Friday.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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Examiner AU2653

March 2, 2006
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ke 3/2/06

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